U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION PEROPE

I. **HEADING**

Date:

September 27, 2001

Subject:

Riverdale Chemical, 220 East 17th Street, Chicago Heights, Cook County, Illinois

From:

Callie Bolattino, On-Scene Coordinator

To:

R. Karl, U.S. EPA, ERB, Chicago, IL.....FAX 312/353-9176 B. Bolen, U.S. EPA, ERB, RS2, Chicago, IL.....FAX 312/353-9176 W. Messenger, U.S. EPA, ERB, Chicago, IL.....FAX 312/353-9176 C. Stanton, U.S. EPA, OSWER, Washington, D.C.....FAX 703/603-9133 K. Peaceman, U.S. EPA, ORC, Chicago, IL.....FAX 312/886-0747 C. Allen, U.S. EPA, OPA, Chicago, IL.....FAX 312/353-1155 J. Maritote, U.S. EPA, ERB, Chicago, IL.....FAX 312/353-9176 B. Everetts, IEPA, Springfield, IL.....FAX 217/782-3258 M. Chezik, DOI, Philadelphia, PA.....FAX 215/597-9845 A. Marouf, U.S. EPA, SF H&S, Chicago, IL.....FAX 312/886-4071

RE:

POLREP #1 - Initial POLREP for Removal Action #2

(August 27, 2001 thru September 28, 2001)

H. **BACKGROUND**

Site No: 05K2

CERCLIS No: ILD059446153

Response Authority: CERCLA Enforcement

Status of Action Memorandum: PRP lead, Enforcement Action Memo signed August 17, 2001

Demobilization Date: N/A

Delivery Order No: N/A - PRP lead

NPL Status: non-NPL

Start Date: August 27, 2001

Completion Date: Planned completion by December 31, 2001

III. SITE DESCRIPTION

A. Incident Category: Active agricultural chemical manufacturer

B. Site Location: 220 East 17th Street, Chicago Heights, Cook County, Illinois

Site Description:

- See Initial POLREP from Removal Action #1.
- The site work which was performed by Riverdale in the first removal action included excavation, confirmatory sampling and disposal. The work was performed in two phases with the first occurring from July - November 2000. During the first phase of removal work, a total of 2,264,29 tons of excavated soil from the railroad unloading area and 1,613.30 tons of excavated soil from the raw materials warehouse were disposed of as special waste at the Laraway Landfill in Laraway, Illinois. The soil was considered special waste because of the suspected presence of kerosene which was widely used at the site as a carrier in the processing of herbicides. In the liquid storage area, 45 samples from 35 locations were collected and analyzed for the presence of selected pesticides. Excavation within the liquid storage area of approximately 100 feet by 50 feet was performed to a depth of 5 feet. Confirmational samples were collected at all excavation areas. This excavation within the liquid storage area produced 1,214.97 tons of special waste that was shipped to Laraway Landfill for disposal and 3,031 tons of special waste that was shipped to Envirotech Landfill in Morris, Illinois for disposal. Twelve samples at six locations were collected within the utility corridor and five samples at three locations were collected within the Hartwell Building Expansion area. All of these samples were analyzed for pesticides and were collected to confirm that the soils in these areas had not been impacted by any historical site activities.
- The second phase of the removal work included the excavation of contaminated soils, disposal and confirmatory sampling from 15 "hot spots" around the property. Additionally, approximately 6 inches of surface soil was excavated from a small wetland in the southeast portion of the site. Soil samples collected at 89 locations in order to determine areas of excavation, provide modeling scenario checks and to confirm remaining risk levels for construction workers. A total of 958 tons of soil was excavated and shipped to the CID Landfill in Chicago, Illinois. The confirmatory sampling indicated that after excavation of the fifteen discrete areas, the remaining soil risk levels at the site are less than a total cancer risk of 1 x 10⁻⁴, a hazard index less than 1, and dioxin below 15 ppb TEQ.
- These removal actions reduced the site cancer risk and hazard index for construction workers to acceptable levels, leaving the remaining site risk applicable only to industrial workers. Addressing this remaining industrial worker risk will be accomplished through the installation of an engineered asphalt cap. Additionally, the installation of a storm water collection system and establishment of institutional controls in the form of deed restrictions will address the possibility of any releases of contaminants from the facility in the future.
- Because of the few remaining locations having dioxin concentrations greater than 5 ppb, risk calculations indicated that removal of additional soils to attain a dioxin TEQ below 5 ppb does not provide a significant or substantial reduction in overall risk to site industrial or construction workers. Additionally, the installation of the engineered asphalt barrier

will remove the potential exposure pathway. As a result of the calculated additional cost for further sampling, excavation and disposal to attain an additional negligible environmental and human health benefit, and the protectiveness inherent in the asphalt cap, the dioxin clean up level of 15 ppb TEQ was determined to be appropriate. The U.S. EPA Office of Emergency and Remedial Response in Washington, D.C. was consulted and concurred that the dioxin clean up level of 15 ppb TEQ is in accordance with the Interim Dioxin Policy of 1998. Concurrence was received via telephone and electronic mail on August 1, 2001.

Description of threat:

• See Initial POLREP for Removal Action #1.

Preliminary Assessment/Site Inspection Results:

• See Initial POLREP for Removal Action #1.

IV. RESPONSE INFORMATION

A. Situation:

Current Situation:

• The temperatures during this removal action averaged in the high 60s° F.

Removal Activities to Date (August 27 - September 28, 2001):

- Work has begun on the following activities and is approximately 30% completed:
 - Subgrade preparation of the site
 - Placement of crushed aggregate base course
 - Placement of bituminous asphalt course
 - Installation of new storm water retention basin in the northwest portion of the site with tie in to city storm sewer

Enforcement:

• The PRP (Riverdale Chemical, now owned by Nufarm) is performing this removal action under an Administrative Order on Consent.

B. Planned Removal Actions:

• Pavement and base course testing will be conducted according to the American Society for Testing and Materials (ASTM) and/or American Association of State Highways and Transportation Officials (AASHTO) standards.

C. Next Steps:

• Continue work on engineered asphalt barrier and storm water retention basin.

D. Key Issues:

• None.

V. COSTS

- Since there is no excavation, disposal or sampling of contaminated soil occurring during this removal action, START is not being utilized for oversight.
- It is estimated that the work to be performed during this removal action will cost Riverdale Chemical approximately \$1,100,000.

VI. DISPOSITION OF WASTES

• No wastes will be disposed of during this removal action.